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EVALUATION REPORT. WATER POLLUTION CONTROL PROGRAM PLAN FOR THE STATE OF SOUTH DAKOTA, DEPARTMENT OF HEALTH, DIVISION OF SANITARY ENGINEERING

Federal Water Pollution Control Administration
Kansas City, Missouri

June 1969

PB 260 342

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A status and evaluation report on the South Dakota Water Pollution Control Program as of mid-1969 is presented. The report includes a summary evaluation, an analysis of program elements, and an internal analysis of program administration and evaluation of program elements.

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U.S. Department of the Interior
Federal Water Pollution Control Administration
Missouri Basin Region, Planning and Program Grants
Kansas City, Missouri
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A. SUMMARY EVALUATION

1. ACCOMPLISHMENTS IN FISCAL YEAR 1969

A. The effectiveness of the Water Quality Monitoring Program was improved including the addition of a water pollution control mobile laboratory. A station has been established on the James River at the North and South Dakota state line.

B. Draft regulations and guidelines for control of agricultural wastes were completed and are now awaiting Water Pollution Committee consideration.

C. Draft changes are completed in use classification to increase the beneficial uses in several streams and lakes. Public hearing on proposed changes is scheduled for early FY 1970.

D. Draft changes are pending to strengthen the Water Quality Standards by amending the water quality criteria and including a nondegradation provision. Public hearing on proposed amendments is scheduled for early FY 1970.

E. Significant increases in number of (1) discharges under permit, (2) waste treatment plant operating reports, and (3) waste treatment facilities inspected.

F. Good progress was made in the Water Quality Standards compliance schedule with regards to municipal waste treatment facility needs.

G. Draft regulations for minimizing damage from dredging activities were proposed.

H. Regulations relating to the construction and installation of marine toilets were adopted.

2. PROBLEMS

A. Insufficient funds and problems in obtaining qualified personnel continue to hamper water pollution control progress.

B. Parts of four streams still do not comply with the Water Quality Standards.

C. While considerable progress has been made in percentage of municipal discharges under permit--98 percent in FY 1969, only 70 percent of industrial discharges are under permit--both are below the 100 percent State requirement.

D. Less than 50 percent of waste treatment plants (excluding Federal facilities) are submitting operating reports. This is a mandatory State requirement.

E. The State's biennial inspection of waste treatment facilities is not considered sufficient to adequately monitor treatment plant operations.

F. The voluntary waste treatment plant operator certification is not successful. Less than 40 percent of the operators are certified.

G. Yankton Marina has fallen behind the waste treatment compliance schedule.

H. Inspection of treatment facilities under construction is not conducted on a routine basis.

3. PROPOSED EXPANSION OR IMPROVEMENT

A. Continue to promote legislation making certification of waste treatment plant operators mandatory.

B. Anticipate adoption of proposed regulations and guidelines for control of agricultural wastes.

C. Adoption of nondegradation provision and other exceptions to the approved Water Quality Standards.

D. Legislation is being requested to increase the beneficial use classification in several streams and lakes and improve water quality criteria in the Standards.

E. Continue efforts to place all municipal and industrial discharges under permit.

F. Continue to update industrial waste water treatment facility inventory.

G. The analysis and evaluation of the data collected through the expanded monitoring program will be used to determine the status and trends of water pollution in the State.

H. Four studies on special pollution problems will be continued as well as river basin surveys and waste inventories on many of the streams in the Black Hills area and along the James River.

I. The State is requesting FWPCA assistance through Basin Planning Grants for the James River and Cheyenne River.

4. STATUS OF WATER QUALITY STANDARDS

South Dakota's Water Quality Standards were approved by the Secretary of the Interior on August 7, 1967. Proposed amendments to the Water Quality Standards, incorporating a nondegradation provision and changes in the Use Classification and Water Quality Criteria, have been drafted and will be acted upon early in FY 1970.

5. GENERAL INTERNAL ADEQUACY

South Dakota's FY 1970 budget of $103,300, including $40,800 of Federal grant assistance, indicates no significant increase over last year's level of spending. This budget will not provide sufficient funds to effectuate the needed comprehensive water pollution control program. The program budget will not allow for the proposed increase in staff. Appropriations for water pollution control are sufficient only to continue the program for FY 1970 at about the same level as for FY 1969. The State continues to have problems in obtaining qualified personnel to carry out its activities. The present staff is efficient and has demonstrated good cooperation with the FWPCA.

There appears to be no legal constraints which would hinder the State's potential effectiveness in developing a strong water pollution control program.

6. PROGRAM ASSISTANCE IN FISCAL YEAR 1970

A. Continue to cooperate with the State in the development and refinement of Water Quality Standards.

B. The FWPCA will provide assistance to the State in recruiting qualified personnel.

C. The regional office of the FWPCA is prepared to assist the State in its Water Quality Monitoring Program by (1) providing water quality data processing services (STORET), (2) developing parameters, and (3) loaning surveillance equipment.

D. Provide State, local, and private staff technicians with essential training at Federal laboratories, research centers, and other installations.

E. Provide support of regional laboratories (mobile and stationary) research capabilities to assist the State in problem areas or special studies.

F. Provide assistance and encouragement in the field of comprehensive planning and special studies.

G. Consideration should be given to developing an on-the-job training (OJT) program under the Cooperative Area Manpower Planning System (CAMPS) for waste treatment plant operators in order to utilize Federal training funds.

B. ANALYSIS OF PROGRAM ELEMENTS

1. PROGRAM INTRODUCTION

South Dakota operates on an annual budget. Last year, the State spent $102,861 (including $40,372 Federal grant funds) in its water pollution control program. This year's operating budget is $103,300. The small increase in this year's estimated budget reflects a $439 increase in Federal grant funds. Estimated expenditures among the program elements are generally unchanged from FY 1969 with major emphasis being given to program elements (A), Pollution Control Surveillance and Enforcement, and (B), Pollution Control Studies and Planning.

The authorized staff assigned to water pollution control activities for FY 1970 is estimated at 11.7 man-years, an increase of almost 2 man-years over FY 1969; however, State appropriations or Federal funds were not increased enough to permit the additional staff. The State indicated that an additional 9.7 man-years of staff are needed, but remain unauthorized.

The lack of sufficient appropriations and the inability to recruit qualified personnel continue to be among the major problems affecting water pollution control progress.

In Item 1.3.2, the State indicated expansion of surveillance, monitoring, and enforcement activities. We question how this is to be done with a budget decrease of almost $4,000 in the pollution control surveillance and enforcement element of this year's budget.

Appropriations made for water pollution control activities for FY 1970 are sufficient only to continue the program at about the same level as for FY 1969.

2. PROGRAM AUTHORITY AND ORGANIZATION

The State Department of Health, through the South Dakota Committee on Water Pollution, has the responsibility of enforcing the State's water pollution control laws. The State Legislature in 1969 amended the laws relating to water pollution by increasing the membership of the committee on water pollution from three to seven members. The committee on water pollution now consists of the following: the State Health Officer of the Department of Health, who is the ex-officio chairman; the Chief Engineer of the Water Resources Commission, the Director of the Department of Game, Fish, and Parks, and four electors of the State from specified fields. These are: industry, livestock feeding, livestock growing, and municipal government. It is unclear as to how such interest groups as general agriculture, metropolitan areas, conservation groups, and the general public will be represented. Although it is recognized that increasing the number of public members could result in making the committee unwieldy, perhaps the specific field of the four electors could be broadened to overcome this difficulty. The Director of the Division of Sanitary Engineering of the State Department of Health

is the Secretary and Executive Officer. The committee has no budget. The committee exercises its responsibilities through the Division of Sanitary Engineering.

The South Dakota Department of Health is the agency authorized to administer Federal programs under Section 7 of the Federal Water Pollution Control Act.

There does not appear to be any legislative constraints which would hinder developing a strong effective water pollution control program.

There appears to be a discrepancy in man-years to be assigned to water pollution control for FY 1970. Form FWPCA-112-4 lists 11.7 man-years assigned to water pollution control. This is an increase of 2.4 man-years over FY 1969; however, Attachment 2.6 states the planned staff increase is 1.7 man-years. It is unclear as to how the staff can be enlarged to this extent with a budget increase of only $439.

3. POLLUTION CONTROL SURVEILLANCE AND COMPLIANCE

3.1 Water Quality Standards and Compliance

The Water Quality Standards for South Dakota were approved by the Secretary of the Interior on August 7, 1967. The Water Quality Standards apply to all surface waters of the State.

In evaluating compliance progress with respect to the Water Quality Standards, the State indicated that the installation of treatment facilities was in compliance with the Schedule of Compliance, Appendices "C" and "D", Water Quality Standards for the Surface Waters of South Dakota. Since none of the municipal compliance dates fall prior to January 1, 1970, the compliance schedule cannot be used too effectively to gage progress. The status of those communities listed for compliance in 1970 are included in the plan. Those communities and industries where contracts were awarded or had treatment facilities under construction were not included in the Water Quality Standards.

Tables 1 and 2 were prepared to evaluate State progress with respect to the Water Quality Standards and compliance.

The class priorities, as listed in the FY 1968 plan, and the numerical priorities outlined in the FY 1969 and FY 1970 plans are not totally consistent with the dates established in the Water Quality Standards, i.e., Class B and low-numbered projects have in some instances earlier compliance dates than Class A and high point projects.

Three communities were added to the needs list for having inadequate treatment. Ten communities on last year's list are reported to have adequate treatment facilities. The status of the remaining municipal facilities was

not reported. Some explanation is needed as to how a city has been found to have adequate treatment, what type of treatment and the loading, etc.

Seven industries were listed in the Water Quality Standards implementation plan. Two were reported to have complied in the FY 1969 Program Plan. The FY 1970 Program Plan indicates that due to change in operation, Keystone (Northwest Beryllium Corporation) has been removed from the needs list. Yankton Marina did not meet its compliance date of January 1, 1968. Information received in the Regional Office indicates that the marina, on the Gavins Point Reservoir, is in an area included in a comprehensive sewerage project under development by the Corps of Engineers. The Corps of Engineers feels there is a good chance the project will be funded during FY 1970. Construction of this project will eliminate the problem at the Yankton Marina.

Parts of four streams (Big Sioux, James, Belle Fourche, and Rapid) still do not comply with the Water Quality Standards. It was indicated in the FY 1969 plan that Rapid Creek would be brought into compliance that year; however, mechanical failures in at least one of the units in the new Rapid City waste water treatment plant appears to be the cause for the delay in meeting the standards. The State now has rescheduled compliance for FY 1970.

According to the Water Quality Standards and this year's Program Plan, waste water construction standards for the treatment and control of farm animal wastes are now completed and awaiting consideration by the Committee on Water Pollution.

South Dakota is making good overall progress in meeting municipal waste treatment facility needs.

Changes designed to strengthen the Water Quality Standards, including a nondegradation provision and improved use classification, water quality criteria, and enforcement provisions are planned for the early part of FY 1970. The proposed changes in the Water Quality Standards are those the FWPCA suggested in FY 1969.

Item 3.1.6 was not answered in the FY 1970 Program Plan. In discussing this omission with the State, they indicated that the answer would be the same as was in the FY 1969 plan, "None needed; numerical standards apply to all waters."

TABLE 1 - MUNICIPALITIES

Name of Municipality	Listed in FY 1969 Plan by Priority	Listed in FY 1970 Plan by Priority	WQS Compliance Date	Present Status
Big Sioux River				
Hudson	88	88	1-1-70	Unreported
Corson	86	86	1-1-70	Unreported
Dell Rapids	80	--	1-1-71	Unreported
Flandreau 1/	--	--	1-1-71	Planning
Sioux Falls 1/	86	90	1-1-71	Under Construction
Sioux Falls 1/	--	--	------	Under Construction
Watertown	--	86	1-1-71	Unreported
Colman 1/	76	--	1-1-71	Under Construction
Elkton	72	--	1-1-71	Unreported
White	64	--	1-1-71	Unreported
Hayward SD 1/	92	--		Planning 2/
Crooks SD	88	--		Unreported 2/
Harrisburg	84	--		Unreported 2/
Ramona	64	--	1-1-71	Unreported 3/
Alcester	62	--	x	Unreported 3/
Volga 1/	--	--	x	Planning 3/
Aurora	--	--	------	Unreported 5/
Brookings 1/	--	--	7-1-72	Under Construction
Egan	--	--	------	Unreported 5/
Ramona	--	--	------	Unreported 5/
James River				
Ashton	86	90	1-1-70	Unreported
Mitchell 1/	--	--	1-1-71	Completed
Andover 1/	--	--	1-1-70	Completed
Artesian	--	--	1-1-70	Completed
Bridgewater 1/	68	--	1-1-70	Under Construction
Doland 1/	56	--	1-1-70	Planning
Frankfort	82	84	1-1-70	Unreported
Highmore 1/	--	--	1-1-70	Completed
Lesterville	74	48	1-1-70	Unreported
Mellette 1/	--	--	1-1-70	Completed
Mount Vernon 1/	--	--	1-1-70	Completed
Warner 1/	68	--	1-1-70	Under Construction
Wolsey	54	--	1-1-70	Unreported
Carthage	58	54	1-1-71	Unreported
Emery 1/	--	--	1-1-71	Completed
Iroquois	60	54	1-1-71	Unreported
Menno	72	62	1-1-71	Unreported
Pierpont	58	54	1-1-71	Unreported
Roscoe 1/	--	--	1-1-71	Completed
St. Lawrence	58	54	1-1-71	Unreported
Wessington	60	80		Unreported
Ethan 1/	90	96		Planning 2/
Raymond	84	82		Unreported 2/

Name of Municipality	Listed in FY 1969 Plan by Priority	Listed in FY 1970 Plan by Priority	WQS Compliance Date	Present Status
Scotland 1/	--	--	x	Completed 3/
Columbia	--	84	--------	Unreported 5/
Olivet	--	--	--------	Unreported 5/
Plankinton 1/	--	--	1-1-71	Completed 4/
Vermillion River				
Centerville	62	--	1-1-71	Completed
Marion 1/	--	--	1-1-71	Completed
Parker 1/	72	--	1-1-71	Under Construction
Canistota 1/	--	--	1-1-71	Completed
Hurley 1/	66	--	1-1-71	Under Construction
Viborg 1/	--	--	1-1-71	Completed
Wakonda 1/	--	58	1-1-70	Planning
Montrose 1/	84	--		Planning 2/
Volin	--	90		Unreported 4/
Eastern Lake Basin				
Arlington	52	44	1-1-71	Unreported
Eden	54	48	1-1-71	Unreported
De Smet	54	--	1-1-71	Unreported
Waubay	50	52	1-1-71	Unreported
Willow Lake	64	64	1-1-71	Unreported
South Shore 1/	90	--		Under Construction 2
Bradley	88	--		Unreported 2/
Florence	88	88		Unreported 2/
Garden City	88	--		Unreported 2/
White River				
Winner 1/	--	--	1-1-71	Completed
Batesland	86	92		Unreported 2/
Interior 1/	84	--		Planning 2/
Martin 1/	--	--	x	Under Construction 3
Bad River				
Midland	60	--	1-1-71	Unreported
Moreau River				
Timber Lake	72	--	1-1-71	Unreported
Dupree	--	--	x	Unreported 3/
Red River of the North				
Veblen	--	--	1-1-71	Completed
Minnesota River				
Gary	74	--	1-1-71	Unreported
Sisseton 1/	--	--	1-1-71	Planning
Corona	84	--		Unreported

Name of Municipality	Listed in FY 1969 Plan by Priority	Listed in FY 1970 Plan by Priority	WQS Compliance Date	Present Status
Cheyenne River Basin				
Deadwood	--	--	1-1-72	Unreported
Lead	--	--	1-1-72	Unreported
Custer	72	74	1-1-71	Unreported
Hill City	72	80	1-1-71	Unreported
Hot Springs	74	82	1-1-71	Unreported
Nisland	74	86	1-1-71	Unreported
Spearfish	88	78	1-1-71	Unreported
Spearfish Valley SD	82	--		Unreported 3/
Missouri River				
Chamberlain	--	--	1-1-71	Unreported
Herreid	72	--	1-1-71	Unreported
Hoven	--	64	1-1-71	Unreported
Java	54	--	1-1-71	Unreported
Lake Andes	--	94	1-1-71	Unreported
Platte 1/	--	--	1-1-71	Planning
Mobridge 1/	--	--	x	Unreported 3/
Pierre 1/	--	--	x	Unreported 3/
Yankton 1/	--	--	x	Unreported 3/
Blunt	--	--		Unreported 5/
Oacoma	--	--		Unreported 5/
Vivian	--	--		Unreported 5/
St. Paul Mission, Marty	--	--	7-1-72	Unreported 4/
Niobrara River				
Fairfax	--	82		Unreported 5/

1/ FWPCA construction grant involved.

2/ Communities added in Section 4.4.2 of FY 1969 Plan.

3/ Communities added to Water Quality Standards implementation plan by Attachment 3.1.5 of FY 1969 Plan.

4/ Communities added to Water Quality Standards implementation plan by Attachment 3.1.5 of FY 1970 Plan.

5/ Communities added in Section 4.4.2 or 4.4.3 of FY 1970 Plan.

TABLE 2 - INDUSTRIES

Name of Industry	WQS Compliance Date	Listed in FY 1969 Plan	Listed in FY 1970 Plan	Present Status
Big Sioux River				
Greenlee Packing Co.	1-1-71	x	x	Unreported
Cheyenne River				
Mines Development, Inc.	Pending	x	x	Unreported
Northwest Beryllium Corporation	7-1-67	x		Completed
Homestake Mine	7-1-72			Unreported
Big Stone Cheese	1-1-71			Completed
Missouri River				
Yankton (Marina)	1-1-68			Unreported
Cimpl Packing	7-1-67			Completed

3.2 Water Quality Monitoring

Water quality surveillance of South Dakota's streams and reservoirs is conducted on a cooperative basis by the State Department of Health, State Department of Games, Fish and Parks, Water Resources Commission, East Dakota Conservancy Sub-District, FWPCA, USGS, and the cities of Sioux Falls and Yankton.

The agency is currently sampling 30 stations at least twice a year to provide mineral and bacteriological data and on a monthly basis to determine DO, pH, alkalinity, temperature, etc. Stations on problem waters such as Rapid Creek, Big Sioux, James, and Belle Fourche Rivers are tested more frequently. Generally, samples are surface grab samples taken from the main current.

Arrangements have been made for the State to borrow one automatic monitor from the FWPCA Regional Office this year. Training will also be provided on the use and maintenance of this equipment.

Of concern to FWPCA in FY 1969 was the need for a surveillance station on the James River at the North and South Dakota border in order to establish baseline data prior to completion of the Garrison Diversion Unit. Such a station is now in operation.

The State's recently purchased mobile laboratory should provide needed support to their monitoring programs.

It is anticipated that the State will eventually utilize the FWPCA's STORET system for reporting water quality and related data.

It is to early to assess the real effectiveness of the program until it has been in operation long enough to provide the State and FWPCA with basic data. From its approach, however, it would seem that the State is developing an adequate monitoring program.

3.3 Effluent Controls

Permits for the discharge of municipal and industrial wastes are required. An estimated 98 percent of the 206 municipal plants and 70 percent of the 31 industrial plants are under permit at present. This represents an increase of 38 percent and 5 percent in the respective categories from last year.

One of the requirements for receiving an effluent permit is that an operating report be submitted. Of the 250 municipal, industrial and State operated waste treatment plants, 32 percent are reporting on a monthly or quarterly basis. The FY 1969 Plan showed only 4 percent reporting. The State failed to submit the procedures used to review and evaluate plans as asked for in 3.3.6.

Since permits expire on a staggered basis, the reporting procedures are reviewed in the same manner. The present situation is much improved from the past year and FY 1971 should show further improvement.

Standard operating forms have been developed for primary and secondary treatment plants and waste stabilization lagoons.

This part of the Plan shows improvement from the previous year. Where possible, it has been strengthened, and an attempt made to comply with last year's Federal Water Pollution Control Administration recommendations.

3.4 Inspection of Treatment Plants

A total of 145 waste treatment facilities were inspected this past year which represented 2 less than the number set forth in the 1969 plan. Inspections are to be made biennially. It would be desirable to perform annual inspections rather than biennial, but the lack of funds and corresponding personnel shortage would seem to make increased activity unlikely.

A limited number of effluent analysis to validate results submitted by the operator are performed in the State Health Laboratory. The laboratory is not operated by or funded by the Water Pollution Control Council, but does provide assistance. The State is continuing to expand its program of bacterial analysis of plant effluents and receiving waters.

A mobile laboratory has been placed in operation and should provide assistance in checking operation of facilities.

The Federal Water Pollution Control Administration provides limited assistance when final construction inspections are made.

While the State did submit copies of the operating forms there was no indication of what review procedure is employed on the reports.

3.5 Certification of Waste Treatment Plant Operators

The basic program is unchanged from that of FY 1969. Attempts to secure mandatory certification through legislation failed again in 1969. Efforts will be continued toward the mandatory certification system. An attempt to adopt the CAMPS program was dropped due to lack of response.

A total of 85 licenses have been issued to 78 municipal, 6 Federal, and 1 State plant operator, an increase of 22 licensed operators over the 1969 level. These figures represent an approximate 35 percent increase which shows marked improvement. The total number of treatment plant operators is needed to complete a certification chart and make an appraisal of the program.

3.6 Enforcement and Regulations

The State has adequate authority to enforce compliance with water quality standards. There have been no enforcement actions during the past two years, remedial actions have been effected through the negotiation process.

Mandatory certification of operators to upgrade waste treatment plant operation is desirable.

Regulations for control of wastes from livestock concentrations has been prepared for adoption by the Committee on Water Pollution.

Consideration is being given for developing regulations for minimizing damage from necessary dredging activities.

The Division of Sanitary Engineering has assisted the Department of Game, Fish and Parks in developing regulations for treatment and disposal of boat and marina wastes.

No formal interagency regulations have been made for control of pollution from State highway construction and vegetation control.

4. WATER POLLUTION CONTROL FACILITIES

Sections 4.1, 4.2, and 4.3 have not been changed since FY 1969. These sections have been found to be satisfactory as proposed for FY 1970.

4.4 Pollution Control Priorities

The priority system is unchanged from that submitted in 1969, which establishes a point system based on per capita cost, beneficial water uses and readiness to proceed.

For FY 1970, 32 projects are listed for Federal construction assistance. These projects have a point spread from 96 to 44. The total estimated cost for the facilities is $1,455,000, which is less than the anticipated Federal assistance that will be available.

The 5-year municipal listing contains 33 communities with total estimated project costs at $8,019,000 which would not utilize all Federal construction assistance anticipated for the period.

Paragraph 4.4.4 - Form FWPCA-112-9 lists the Yankton Marina as a State installation requiring improvements. This marina, on the Gavins Point Reservoir, is in an area included in a comprehensive sewerage project under development by the Corps of Engineers. The Corps of Engineers feels there

is a good chance the project will be funded during FY 1970 (the State has apparently agreed to share a portion of the cost). Construction of this project will eliminate the problem at the Yankton Marina.

The State has assisted and cooperated in the control of pollution from Federal installations and activities in a sufficient and satisfactory manner. No deficiencies were noted in the FY 1969 Evaluation Report and none should be included this year. There are nine (9) Federal installations in the State that are not in compliance with E. O. 11288 and applicable water quality standards and regulations. All but two of these are listed in Attachment 4.4.5. Our records indicate that this section should be updated as follows:

1. Show "Ellsworth Air Force Base LCF Sites" as - Under Construction.

2. Delete "Pine Ridge" - this is not a Federal installation.

3. Add "Flandreau Indian School."

4. Add "Porcupine Day School" - (Existing).

5. Add the word "Structure" after the word "Intake" for both Oahe and Fort Randall. There are two separate facilities at both of these dams.

5. TRAINING

Training is essentially unchanged from the previous year. Considering the many demands which must be met, it is gratifying to note that the State has again allotted over 10 percent of its limited water pollution control budget to training.

Participation in the CAMPS program could make additional training resources available; however, the administrative work to develop a CAMPS project at this time would be burdensome for a small staff. The decision not to participate is disappointing but under the circumstances is not to be criticized. It is hoped that certain pilot projects underway will make CAMPS participation easier and by FY 1971 the State will decide to participate.

6. POLLUTION CONTROL STUDIES AND PLANNING

The State has indicated that special studies have been completed on the wastewater treatment facilities at Belle Fourche, Custer, Hill City, and Sturgis. These reports were not provided with the State Program Plan. Several of the studies mentioned in last year's plan are repeated in this year's plan.

Underway (mentioned in last year's plan)

1. Updating wastewater treatment facility inventory.

2. River Basin surveys and waste inventories on many of the streams in the Black Hills area and along the James River.

3. Continue to collect, analyze, and evaluate monitoring data to determine status and trends of water pollution in the State. This is a coordinated effort with USGS, Corps of Engineers, and communities of the State.

4. A survey of the James River by the South Dakota State University relative to the waste water runoff from feedlots.

5. Assimilation capacity of the Big Sioux River downstream from Sioux Falls. Study under the auspices of the East Dakota Conservancy Sub-district and Water Resources Commission.

6. A cooperative study with the FWPCA on radioisotopes from the process system at Mines Development, Inc., may be continued.

Three other studies mentioned as underway in the FY 1969 Program Plan are not included in this year's Plan. The status of these studies should be ascertained and/or copies of the reports obtained.

Proposed

The State indicates that FWPCA assistance will be sought for the following activities:

1. Basin Planning Grants for the Cheyenne River and James River.

2. Research and Demonstration grant for joint municipal and industrial treatment systems at Volga.

3. Special study assistance on feedlot wastes.

Planning activities, Sections 6.2.1 through 6.2.6 have not been changed significantly from the FY 1969 Plan. These sections have been found to be satisfactory as proposed for FY 1970.

The State is continuing its active role in water pollution control studies and planning. An increase of .6 man-year of effort will be added to this program in FY 1970 bringing the total effort to 2.4 man-years. This increase in effort is needed if the State is to continue its role of coordina-

tion and assistance to Federal and State agencies, regional governments and educational institutions with respect to water pollution control activities. The State's water pollution control agency is involved with many major planning efforts in the State, including the Comprehensive Statewide Development Plan, Governor's longrange planning for air and water pollution problems and the Water Resources Planning Act. The FWPCA is available to assist the State in its planning activities.

7. PUBLIC INFORMATION

The water pollution control agency is quite active in the field of public information. A budget of $8,400 and .9 man-year will be devoted to this activity during the program year. The State recognizes the need for a full-time trained public information officer; however, lack of sufficient funds preclude such an action at present. The agency presently distributes a quarterly publication, "Clarifier," to 800 newspapers, city officials, industries, organizations, etc. Booklets, pamphlets, and news releases are likewise widely disseminated. In addition, speakers are provided for organizations and conferences, and public meetings are held to discuss pollution problems involving large areas.

The State should give consideration to expanding the program in two ways--both of which can be accomplished without much capital outlay. One, movies and packet material can be provided schools on a regular basis, and two, the State should enlist the capabilities of conservation and sportsmen's organizations in the fight against water pollution.

C. INTERNAL ANALYSIS

1. GENERAL

Staffing is a problem. There is little or no hope for a sufficient staff increase through FY 1971.

While some of the State's more pressing needs are being met on a timely basis, much remains to be done.

Improvement is needed in the operation and maintenance of waste treatment plants.

Less than 60 percent of the State's installation were inspected last year. While this meets the biennial inspection goal, a minimum of annual inspections or visits are needed.

Certification of waste treatment plant operators remains on a voluntary basis. While there has been some improvement probably less than 20 percent of the operators have been certified.

Reports were submitted for less than 40 percent of the waste treatment plants. This is a marked increase over the 4 percent submitted last year but still does not meet the 100 percent required by state regulation.

Good improvement has been indicated with the proposed strengthening of the water quality standards by amendments and the addition of a proposed non-degradation provision.

While South Dakota shows general improvement in its Water Pollution Control program, additional staff is needed to permit a greater effort in planning, special studies, inspection of waste treatment facilities, monitoring, training, public information and education, and other program elements to assure and effective total program. The State should increase its efforts on agricultural related water pollution problems, such as feedlot runoff and irrigation return flows.

2. EVALUATION RATING

The State's overall rating is Adequate. Taking each program element independently, the ratings would be as follows:

Program Authority and Organization - Adequate

Water Quality Standards and Compliance - Adequate to Good

Water Quality Monitoring - Marginal to Adequate

Effluent Controls - Adequate to Good

Inspection to Treatment Plants - Marginal

Certification of Waste Treatment Plant Operators - Marginal

Enforcement and Regulation - Adequate

Review of Plans and Specifications - Adequate to Good

Municipal Construction Assistance - Adequate

Industrial Waste Treatment Assistance - Adequate

Pollution Control Priorities - Marginal to Adequate

Training - Marginal to Adequate

Pollution Control Studies and Planning - Adequate

Public Information - Adequate

3. REVIEW COMMENTS

Technical staff comments, including those of the Regional Review Board, are incorporated into the main text of the Evaluation Report.